AMENDMENTS TO THE CLAIMS

1. (CURRENTLY AMENDED) A method ~~in a signaling gateway~~ in a network, the method including:

determining by a signaling gateway a congestion level for each of a plurality of Voice over IP-based application server process groups, each of the application server process groups distinct from the signaling gateway and sharing a same prescribed point code with the signaling gateway, each application server process group having at least one assigned application server process sharing the prescribed point code and configured for providing services for a corresponding message signaling unit attribute, each application server process assigned to one of the application server process groups; ~~the signaling gateway having a prescribed point code~~;

receiving by the signaling gateway an SS7 message having an originating point code specifying an originating node and a destination point code specifying the prescribed point code, the SS7 message carrying a message signaling unit having specified attributes;

identifying by the signaling gateway one of the application server process groups as a candidate group for processing the message signaling unit based on a determined match between the corresponding message signaling unit attribute and at least a corresponding portion of the specified attributes; and

selectively sending by the signaling gateway to the originating node a congestion notification message based on determining that an identified priority of the message signaling unit does not exceed the corresponding congestion level for the candidate group.

2. (ORIGINAL) The method of claim 1, wherein the determining step includes determining the congestion levels for each application server process group based on a corresponding traffic configuration.

3. (CURRENTLY AMENDED) The method of claim 2, wherein the traffic configuration for a corresponding application server process group includes one of an override configuration, a loadshare configuration, a broadcast configuration, [[and]] or a loadshare bindings configuration.

4. (CURRENTLY AMENDED) The method of claim 3, wherein the determining includes:

selectively setting the congestion level for a corresponding application server process group based on a highest determined congestion of an associated one of the application server processes, based on the corresponding application server process group having the override configuration;

selectively setting the congestion level for a corresponding application server process group based on a lowest determined congestion of an associated one of the application server processes, based on the corresponding application server process group having the loadshare configuration;

selectively setting the congestion level for a corresponding application server process group based on a lowest determined congestion of an associated one of the application server processes, based on the corresponding application server process group having the broadcast configuration; and

selectively setting the congestion level for a corresponding application server process group based on a highest determined congestion of an associated one of the application server processes, based on the corresponding application server process group having the ~~override~~ loadshare bindings configuration;

each application server process assigned to only one of the application server process groups.

5. (ORIGINAL) The method of claim 1, wherein a first and second of the application server process groups are configured for providing Signalling Connection Control Part (SCCP) message service and ISDN User Part message service as the respective message signaling unit attributes.

6. (ORIGINAL) The method of claim 1, further comprising:

receiving a second SS7 message having a second originating point code specifying a

second originating node and the destination point code specifying the prescribed point code, and carrying a second message signaling unit having second specified attributes;

identifying another one of the application server process groups as a second candidate group based on determined match between the corresponding message signaling unit attribute and at least a corresponding portion of the second specified attributes, distinct from the portion of the specified attributes of the message signaling unit;

sending the second message signaling unit to an identified active one of the application server processes of the another one of the application server process groups, based on a determined priority of the second message signaling unit exceeding the congestion level of the second candidate group and independent of the congestion level of the candidate group.

7. (ORIGINAL) The method of claim 1, further comprising selectively outputting to an identified one of the assigned application server processes of the candidate group the message signaling unit based on determining that the identified priority of the message signaling unit exceeds the corresponding congestion level for the candidate group.

8. (ORIGINAL) The method of claim 7, wherein the selectively outputting includes identifying the identified one assigned application server process based on receiving an application server process active message from the identified one assigned application server process.

9. (CURRENTLY AMENDED) A signaling gateway in a network, the signaling gateway comprising:

means for determining a congestion level for each of a plurality of Voice over IP-based application server process groups, each application server process group distinct from the signaling gateway and sharing a same prescribed point code with the signaling gateway, each application server process group having at least one assigned application server process sharing the prescribed point code and configured for providing services for a corresponding message

signaling unit attribute, each application server process assigned to one of the application server process groups~~, the signaling gateway having a prescribed point code~~;

means for receiving an SS7 message having an originating point code specifying an originating node and a destination point code specifying the prescribed point code, the SS7 message carrying a message signaling unit having specified attributes;

means for identifying one of the application server process groups as a candidate group for processing the message signaling unit based on a determined match between the corresponding message signaling unit attribute and at least a corresponding portion of the specified attributes; and

the determining means configured for selectively sending to the originating node a congestion notification message based on determining that an identified priority of the message signaling unit does not exceed the corresponding congestion level for the candidate group.

10. (ORIGINAL) The gateway of claim 9, wherein the determining means is configured for determining the congestion levels for each application server process group based on a corresponding traffic configuration.

11. (CURRENTLY AMENDED) The gateway of claim 10, wherein the traffic configuration for a corresponding application server process group includes one of an override configuration, a loadshare configuration, a broadcast configuration, [[and]] or a loadshare bindings configuration.

12. (CURRENTLY AMENDED) The gateway of claim 11, wherein the determining means is configured for:

selectively setting the congestion level for a corresponding application server process group based on a highest determined congestion of an associated one of the application server processes, based on the corresponding application server process group having the override configuration;

selectively setting the congestion level for a corresponding application server process group based on a lowest determined congestion of an associated one of the application server processes, based on the corresponding application server process group having the loadshare configuration;

selectively setting the congestion level for a corresponding application server process group based on a lowest determined congestion of an associated one of the application server processes, based on the corresponding application server process group having the broadcast configuration; and

selectively setting the congestion level for a corresponding application server process group based on a highest determined congestion of an associated one of the application server processes, based on the corresponding application server process group having the ~~override~~ loadshare bindings configuration;

each application server process assigned to only one of the application server process groups.

13. (ORIGINAL) The gateway of claim 9, wherein a first and second of the application server process groups are configured for providing Signalling Connection Control Part (SCCP) message service and ISDN User Part message service as the respective message signaling unit attributes.

14. (ORIGINAL) The gateway of claim 9, wherein:

the receiving means is configured for receiving a second SS7 message having a second originating point code specifying a second originating node and the destination point code specifying the prescribed point code, and carrying a second message signaling unit having second specified attributes;

the identifying means configured for identifying another one of the application server process groups as a second candidate group based on determined match between the corresponding message signaling unit attribute and at least a corresponding portion of the second

specified attributes, distinct from the portion of the specified attributes of the message signaling unit;

the determining means configured for sending the second message signaling unit to an identified active one of the application server processes of the another one of the application server process groups, based on a determined priority of the second message signaling unit exceeding the congestion level of the second candidate group and independent of the congestion level of the candidate group.

15. (ORIGINAL) The gateway of claim 9, wherein the determining means is configured for outputting to an identified one of the assigned application server processes of the candidate group the message signaling unit based on determining that the identified priority of the message signaling unit exceeds the corresponding congestion level for the candidate group.

16-24 (CANCELED).

25. (NEW) A signaling gateway in a network, the signaling gateway comprising:

a congestion level detection circuit configured for determining a congestion level for each of a plurality of Voice over IP-based application server process groups, each application server process group distinct from the signaling gateway and sharing a same prescribed point code with the signaling gateway, each application server process group having at least one assigned application server process sharing the prescribed point code and configured for providing services for a corresponding message signaling unit attribute, each application server process assigned to one of the application server process groups;

a switched circuit network interface configured for receiving an SS7 message having an originating point code specifying an originating node and a destination point code specifying the prescribed point code, the SS7 message carrying a message signaling unit having specified attributes; and

a routing circuit configured for identifying one of the application server process groups as

a candidate group for processing the message signaling unit based on a determined match between the corresponding message signaling unit attribute and at least a corresponding portion of the specified attributes;

the congestion level detection circuit configured for selectively sending to the originating node a congestion notification message based on determining that an identified priority of the message signaling unit does not exceed the corresponding congestion level for the candidate group.

26. (NEW) The gateway of claim 25, wherein the congestion level detection circuit is configured for determining the congestion levels for each application server process group based on a corresponding traffic configuration.

27. (NEW) The gateway of claim 26, wherein the traffic configuration for a corresponding application server process group includes one of an override configuration, a loadshare configuration, a broadcast configuration, or a loadshare bindings configuration.

28. (NEW) The gateway of claim 27, wherein the congestion level detection circuit is configured for:

selectively setting the congestion level for a corresponding application server process group based on a highest determined congestion of an associated one of the application server processes, based on the corresponding application server process group having the override configuration;

selectively setting the congestion level for a corresponding application server process group based on a lowest determined congestion of an associated one of the application server processes, based on the corresponding application server process group having the loadshare configuration;

selectively setting the congestion level for a corresponding application server process group based on a lowest determined congestion of an associated one of the application server

processes, based on the corresponding application server process group having the broadcast configuration; and

selectively setting the congestion level for a corresponding application server process group based on a highest determined congestion of an associated one of the application server processes, based on the corresponding application server process group having the loadshare bindings configuration;

each application server process assigned to only one of the application server process groups.

29. (NEW) The gateway of claim 25, wherein a first and second of the application server process groups are configured for providing Signalling Connection Control Part (SCCP) message service and ISDN User Part message service as the respective message signaling unit attributes.

30. (NEW) The gateway of claim 25, wherein:

the switched circuit network interface is configured for receiving a second SS7 message having a second originating point code specifying a second originating node and the destination point code specifying the prescribed point code, and carrying a second message signaling unit having second specified attributes;

the routing circuit configured for identifying another one of the application server process groups as a second candidate group based on determined match between the corresponding message signaling unit attribute and at least a corresponding portion of the second specified attributes, distinct from the portion of the specified attributes of the message signaling unit;

the congestion level detection circuit configured for causing the second message signaling unit to be sent to an identified active one of the application server processes of the another one of the application server process groups, based on a determined priority of the second message signaling unit exceeding the congestion level of the second candidate group and independent of the congestion level of the candidate group.

31. (NEW) The gateway of claim 30, further comprising an Internet Protocol (IP) based output circuit configured for outputting the second message signaling unit to the identified active one of the application server processes.

32. (NEW) The gateway of claim 25, wherein the congestion level detection circuit is configured for causing the message signaling unit to be output to an identified one of the assigned application server processes of the candidate group based on determining that the identified priority of the message signaling unit exceeds the corresponding congestion level for the candidate group.

33. (NEW) The gateway of claim 32, wherein the congestion level detection circuit is configured for identifying the identified one assigned application server process based on receiving an application server process active message from the identified one assigned application server process.